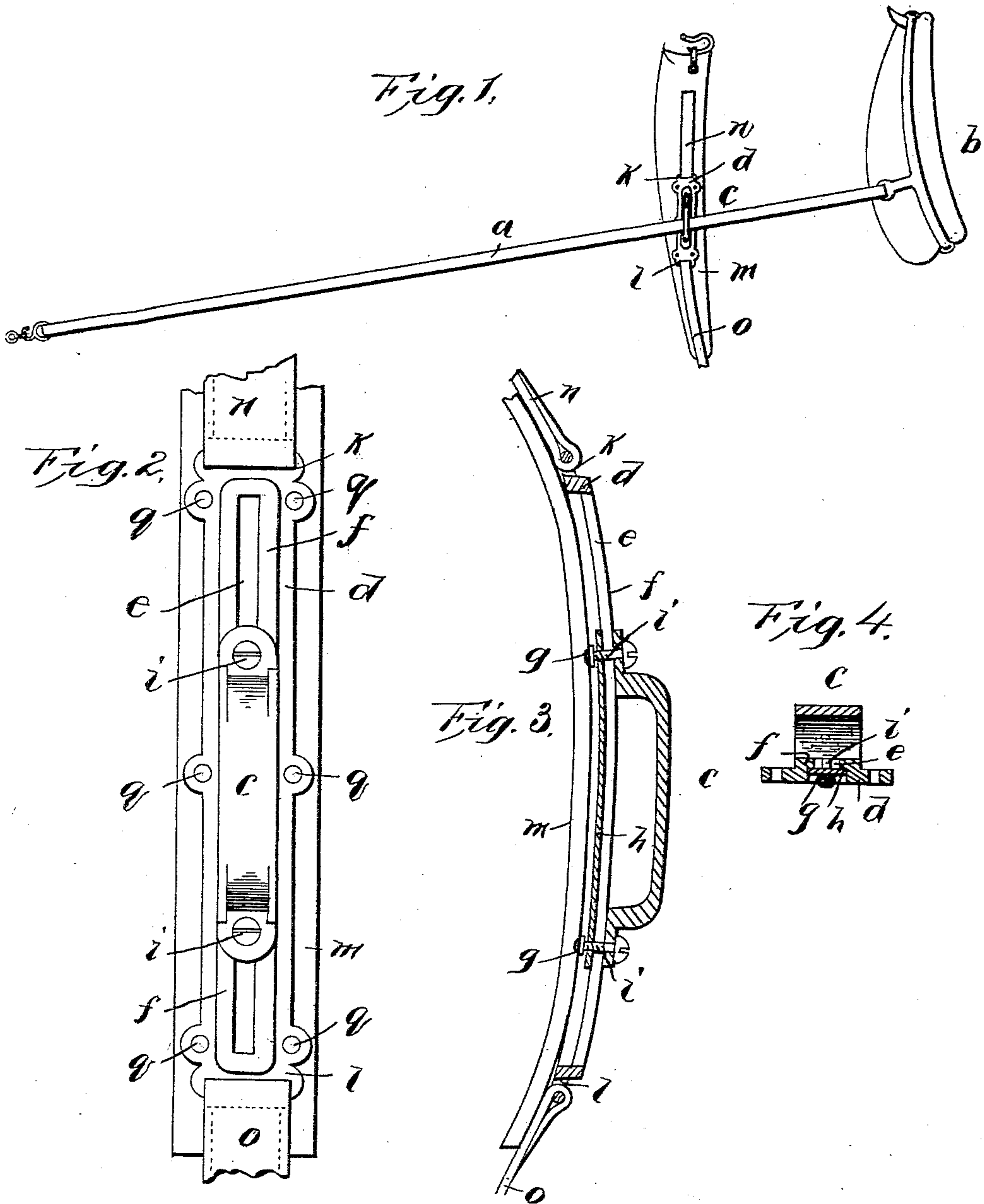


(No Model.)

C. E. YOUNG.
TRACE GUIDE.

No. 476,719.

Patented June 7, 1892.



WITNESSES:

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CHARLES E. YOUNG, OF SABETHA, KANSAS.

TRACE-GUIDE.

SPECIFICATION forming part of Letters Patent No. 476,719, dated June 7, 1892.

Application filed January 4, 1892. Serial No. 416,982. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. YOUNG, of Sabetha, in the county of Nemaha and State of Kansas, have invented certain new and useful
5 Improvements in Trace-Guides; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings,
10 and to the letters of reference marked thereon, which form part of this specification.

This invention relates to certain improvements in harness, and more particularly to an
15 improved trace guide or support.

The object of the invention is to provide an improved adjustable trace-support exceedingly strong and durable in construction and composed of a minimum number of parts.

20 The invention consists in certain novel features of construction and in combinations of parts more fully and particularly pointed out hereinafter.

Referring to the accompanying drawings,
25 Figure 1 is a view showing part of harness provided with my invention. Fig. 2 is a side elevation thereof. Fig. 3 is a longitudinal section, and Fig. 4 is a cross-section.

In the drawings reference-letter *a* indicates
30 a trace having its front end secured to the hame—such as *b*—as usual and at its rear end secured to the singletree.

c indicates the trace-support or loop through which the trace passes. This loop has outwardly-extending perforated ends located on
35 the outer face of the metal plate *d*, this plate being provided with transverse slot *e*, extending longitudinally of the plate and closed at the ends. At the outer side of the slot the plate is provided with raised bearing-surfaces
40 *f*, on which the ends of the guide or loop bear and slide, and the inner longitudinal edges of the said slot are recessed, rabbeted, or countersunk, so that the clamping-plate *h* can
45 slide therein flush with or beneath the inner surface of the plate *d*. Bolts *i* pass through the ends of the guide-loop and through said slot in the main or carrier plate *d* and through screw-threaded openings in the ends of the
50 clamping-plate, so that the guide-loop can be adjusted vertically throughout the length of

the slot in the supporting-plate and can be clamped in the desired position by tightening said screws, which clamps the ends of the loop against said bearing-surfaces. The ends
55 of the bolts at the inner surfaces of the clamping-plate are preferably upset on washers *g*, as shown, so that the bolts cannot unscrew and drop out. The ends of the supporting-plate are provided with loops or eyes *k* *l*, respectively. The supporting-plate rests on a
60 pad-skirt *m* and is longitudinally curved to conform to the curve of the animal's side, and a strap *n* is passed through the upper loop *k* and strongly and firmly sewed to the
65 upper portion of the pad-skirt. The girth or belly-band billet *o* is passed through the lower eye *l* and is firmly sewed to the lower end of the pad-skirt, as shown. The flat sides of the supporting-plate are provided with per-
70 forations, and a suitable number of rivets *q* are passed through the pad-skirt and said perforations and are then upset, thereby firmly and securely holding the supporting
75 or guide loop and the supporting-plate in a proper position. It will thus be seen that this plate is secured by the two eyes at the end and the sewing of the straps passed through said eyes to the pad-skirt and is further-
80 more secured by the rivets.

This invention possesses many and great advantages. The supporting-loop is adjusted so that the trace will pass therethrough in the line of draft, avoiding excessive friction and wear on the trace and excessive jerking and
85 jar on the animal's shoulders. The supporting-loop when adjusted is rigidly clamped in the desired position, and the supporting-plate is so rigidly secured that there are no loose parts to rattle and thereby wear and make
90 unpleasant noises.

There are many other advantages which my invention possesses which it is not necessary to here enumerate.

Having thus fully described my invention,
95 what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination of a plate provided with a longitudinal slot and eyes or loops at the end of said plate, the trace-loop having both
100 ends bearing on said plate, and the clamping-plate at the inner side of said slot, and bolts

passing through both ends of said loop and said slot and the clamping-plate, as and for the purposes set forth.

2. In combination, the pad-skirt, the sup-
5 porting-plate extending longitudinally there-
of and riveted or otherwise secured thereto
and having eyes at its opposite ends, the up-
per eye being rigidly secured to the pad-skirt
by the strap passed therethrough, the girth
10 or belly-band billet passed through the lower
eye, said plate having a longitudinal slot, a

vertically-adjustable trace-loop at the outer
side of said slot, and clamping means where-
by said loop is clamped in the desired verti-
cal position.

In testimony that I claim the foregoing as
my own I affix my signature in presence of two
witnesses.

CHARLES E. YOUNG.

Witnesses:

E. RUSE,

J. H. RUSE.